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## **CLAIMS**

What is claimed is:

1. A method of monitoring nodes in a network including a plurality of nodes, 5 comprising:

processing at least one node identified by an identifier in a set of a circular list of sets, each set of the circular list of sets including zero or more identifiers of nodes; and advancing to the next set of the circular list of sets.

- 10 2. The method of claim 1, wherein processing the at least one node includes sending a polling message to the at least one node.
  - 3. The method of claim 1, wherein the processing the at least one node includes moving the identifier to a subsequent set of the circular list of sets.
  - 4. The method of claim 3, wherein the subsequent set is the set that will be processed at the next timing interval of the node identified by the identifier.
- 5. The method of claim 1, further comprising adding a copy of the identifier to a subsequent set of the circular list of sets.
  - 6. The method of claim 5, wherein the subsequent set is the set that will be processed when a response from the node identified by the identifier is expected.
- The method of claim 1, further comprising processing polling responses.
  - 8. The method of claim 1, wherein the processing and advancing are performed at periodic intervals.

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9. A system, comprising:

a processor; and

a memory storing a network management system for execution by the processor for monitoring nodes in a network including a plurality of nodes, the network management system comprising:

computer code that processes at least one node identified by an identifier in asset of a circular list of sets, each set of the circular list of sets including zero or more identifiers of nodes; and

computer code that advances to the next set of the circular list of sets.

10. A system for monitoring nodes in a network including a plurality of nodes, comprising:

means for processing at least one node identified by an identifier in a set of a circular list of sets, each set of the circular list of sets including zero or more identifiers of nodes; and means for advancing to the next set of the circular list of sets.

11. A method of monitoring nodes in a network including a plurality of nodes, comprising:

receiving a signal from a timer at periodic intervals;

processing polling responses;

processing at least one node identified by an identifier in a set of a circular list of sets by sending a polling message to the at least one node, each set of the circular list of sets including zero or more identifiers of nodes; and

advancing to the next set of the circular list of sets.

- 12. The method of claim 11, wherein the processing the at least one node includes moving the identifier to a subsequent set of the circular list of sets.
- 13. The method of claim 12, wherein the subsequent set is the set that will be processed at the next timing interval of the node identified by the identifier.

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- 14. The method of claim 11, further comprising adding a copy of the identifier to a subsequent set of the circular list of sets.
- 5 15. The method of claim 14, wherein the subsequent set is the set that will be processed when a response from the node identified by the identifier is expected.
  - 16. A system, comprising:

a processor; and

a memory storing a network management system for execution by the processor for monitoring nodes in a network including a plurality of nodes, the network management system comprising:

computer code for a timer that generates a signal at periodic intervals; computer code for a poller that processes polling responses; processes at least one node identified by an identifier in a set of a circular list of sets by sending a polling message to the at least one node, each set of the circular list of sets including zero or more identifiers of nodes; and advances to the next set of the circular list of sets.

17. A system for monitoring nodes in a network including a plurality of nodes, comprising:

means for receiving a signal from a timer at periodic intervals; means for processing polling responses;

means for processing at least one node identified by an identifier in a set of a circular list of sets by sending a polling message to the at least one node, each set of the circular list of sets including zero or more identifiers of nodes; and

means for advancing to the next set of the circular list of sets.